UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Center for Environmental Measurements & Modeling
Research Triangle Park, NC 27711

OFFICE OF
RESEARCH AND DEVELOPMENT

April 25, 2023

Stephen Toner
Teledyne API

Re: Approval of four Modification Requests for the Teledyne T640/T640x PM FEM monitors

Steve,

This letter is with regard to the four Teledyne Modification Requests listed in the table below:

Teledyne Model	PM Metric	Designation No.	Modification Request No.
T640	$PM_{2.5}$	EQPM-0516-236	MM23-057
T640x	$PM_{2.5}$	EQPM-0516-238	MM23-094
T640x	$PM_{10-2.5}$	EQPM-0516-240	MM23-095
T640x	PM_{10}	EQPM-0516-239	MM23-086

This office has completed its evaluation of the information that you submitted for the above four Modification Requests under the listed designations. Based on review of the information submitted, the Ambient Air Branch of the U.S. EPA's Center for Environmental Measurements and Modeling has determined that these four Modification Requests have all been shown to reasonably satisfy all requirements in accordance with 40 CFR 53.14, Modification of a Reference or Equivalent Method.

These Modification Requests are hereby approved in accordance with 40 CFR 53.14, Modification of a Reference or Equivalent Method. However, please email us copies of any revisions to the Operating Manuals that will be required to incorporate the Network Data Alignment factors, when the revised Manuals become available.

Revisions to Designation Descriptions

The suggested updates to these four AMTIC designation descriptions are provided below. Please confirm that these descriptions are acceptable or suggest any changes that could be made to improve their content.

Teledyne Advanced Pollution Instrumentation Model T640 PM Mass Monitor
Automated Equivalent Method: EQPM-0516-236
"Teledyne Advanced Pollution Instrumentation Model T640 PM mass monitor," continuous ambient particulate monitor operated at a volumetric flow rate of 5.0 Lpm, equipped with a TAPI 5-Lpm sample inlet (P/N: 081050000), TAPI aerosol sample conditioner (P/N: 081040000), configured for operation with or without Network Data Alignment enabled, and operated in accordance with the Teledyne Model T640 Operations Manual. This designation applies to $PM_{2.5}$ measurements only.
Federal Register: Vol. 81, page 45285, 07/13/2016
Latest modification: 3/2020, 4/2023

Teledyne Advanced Pollution Instrumentation Model T640 PM Mass Monitor with 640X Option

Automated Equivalent Method: EQPM-0516-238

"Teledyne Advanced Pollution Instrumentation Model T640 PM mass monitor with 640X option," continuous ambient particulate monitor operated at a volumetric flow rate of 16.67 Lpm equipped with the louvered PM_{10} inlet specified in 40 CFR 50 Appendix L, Figs. L–2 thru L–19, TAPI aerosol sample conditioner (P/N: 081040000), configured for operation with or without Network Data Alignment enabled, in accordance with the Teledyne Model T640 Operations Manual. This designation applies to $PM_{2.5}$ measurements only.

Federal Register: Vol. 81, page 45285, 07/13/2016

Latest modification: 3/2020, 4/2023

Teledyne Advanced Pollution Instrumentation Model T640 PM Mass Monitor with 640X Option

Automated Equivalent Method: EQPM-0516-240

"Teledyne Advanced Pollution Instrumentation Model T640 PM mass monitor with 640X option," continuous ambient
particulate monitor operated at a volumetric flow rate of 16.67 Lpm, equipped with the louvered PM_{10} inlet specified in 40 CFR 50 Appendix L, Figs. L–2 thru L–19, TAPI aerosol sample conditioner (P/N: 081040000), configured for operation with or without Network Data Alignment enabled, in accordance with the Teledyne Model T640 Operations Manual. This designation applies to $PM_{10-2.5}$ measurements only.

Federal Register: Vol. 81, page 45285, 07/13/2016

Latest modification: 3/2020, 4/2023

Teledyne Advanced Pollution Instrumentation Model T640 PM mass monitor with 640X option

Automated Equivalent Method: EQPM-0516-239

"Teledyne Advanced Pollution Instrumentation Model T640 PM mass monitor with 640X option," continuous ambient particulate monitor operated at a volumetric flow rate of 16.67 Lpm, equipped with the louvered PM_{10} inlet specified in 40 CFR 50 Appendix L, Figs. L–2 thru L–19, TAPI aerosol sample conditioner (P/N: 081040000), configured for operation with or without Network Data Alignment enabled, in accordance with the Teledyne Model T640 Operations Manual. This designation applies to PM_{10} measurements only.

Federal Register: Vol. 81, page 45285, 07/13/2016

Latest modification: 3/2020, 4/2023

Revisions to the AMTIC Method Code Descriptions

The table below details revisions which will be made to the ATMIC list of Method Codes.

Method	Designation No.	Method Code (as available in the AQS data system)
Teledyne T640 $PM_{2.5}$ Mass Monitor	EQPM-0516-236	236
Teledyne T640 $PM_{2.5}$ Mass Monitor with Network Data Alignment enabled	EQPM-0516-236	636
Teledyne T640x $PM_{2.5}$ Mass Monitor	EQPM-0516-238	238
Teledyne T640x $PM_{2.5}$ Mass Monitor with Network Data Alignment enabled	EQPM-0516-238	638
Teledyne T640x $PM_{10-2.5}$ Mass Monitor	EQPM-0516-240	240
Teledyne T640x $PM_{10-2.5}$ Mass Monitor with Network Data Alignment enabled	EQPM-0516-240	640
Teledyne T640x PM_{10} Mass Monitor	EQPM-0516-239	239
Teledyne T640x PM_{10} Mass Monitor with Network Data Alignment enabled	EQPM-0516-239	639

Per our policy, approval of these Modification Requests will not be announced in the *Federal Register* but will be included in the next revision to the AMTIC's List of Designated Reference and Equivalent Methods, which is scheduled for mid-June 2023.

Any questions regarding the approval of these Modification Requests should be directed to the Ambient Air Branch by letter or e-mail to vanderpool.robert@epa.gov .

Sincerely,

Robert W. Vanderpool

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Robert W. Vanderpool, Ph.D.
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Ambient Air Branch (D205-03)

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